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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/619,576	07/16/2003	Hiroshi Watanabe	00862.023157	7094

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EXAMINER

CARRILLO, BIBI SHARIDAN

ART UNIT	PAPER NUMBER
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1746

DATE MAILED: 07/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/619,576

Applicant(s)

WATANABE ET AL.

Examiner

Sharidan Carrillo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-7,16 and 20-22 is/are pending in the application.
- 4a) Of the above claim(s) 16 and 20-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1,3-7 and 20-22 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4/20/06, 1/26/06, 11/16/2005, 9/21/03
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 3, and 5-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Taiwan Patent 468205.

The examiner is relying on the translation of the above patent, as provided by applicant. In reference to claim 1, the prior art teaches on page 1, paragraph 3 of the translation a substrate processing method comprising: a closing step of placing a substrate in a processing bath, closing the processing bath, a pressure control step of changing an internal pressure of the processing bath with the substrate dipped in a processing solution, wherein the pressure control step comprises an evacuation step of evacuating the processing bath. Page 2, paragraph 3 of the translation further teaches lowering the pressure of the chamber to push out particles out of said surface by bubbles. Paragraph 3 further teaches repeating the evacuation and pressurization a plurality of times. The limitations are claim 6 are inherently met since a film would be formed on the substrate as a result of dipping in a processing solution.

3. Claims 1, and 4-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Kanetake et al. (JP3-44927).

Kanetake teaches treating a semiconductor wafer comprising placing the wafer in

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a sealed processing tank 10, decreasing the pressure inside the processing tank to a predetermined pressure of 10 mmHg-100mmHG, supplying a cleaning fluid 3, for example purified water, to the interior of the tank to immerse the wafer 4 (Fig.2) and a pressure control step, wherein the pressure is returned to atmospheric pressure (paragraphs 18-19). In reference to claim 4, refer to paragraph 19. In reference to claim 5, refer to paragraphs 13 and 15. In reference to claims 6-7, the limitations are inherently met since paragraph 23 teaches the wafer being wet prior to removal from the tank 10 to be dried by drier 4. Paragraph 18 teaches the cleaning fluid as water.

4. Claims 1, and 3-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Allen (3968276).

Allen teaches a method of treating wood comprising placing the wood in a sealed chamber, evacuating the chamber, supplying an aqueous solution to submerge the wood, securing the vacuum and applying pressure. In the abstract, Allen teaches repeating the vacuum and pressure cycle. In reference to claim 4, col. 3, lines 23-25 teaches pressures of 2 inches of Hg, which is less than atmospheric pressure. Re claim 5, col. 5, lines 53-55 teaches evacuating to remove air. The limitations of claims 6-7 are inherently met since the wood is et after contact with the aqueous solution.

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

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only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1, and 3-7 are rejected under 35 U.S.C. 102(e) as being anticipated by Kuriyama et al. (6544585).

Kuriyama teaches a method of treating a substrate comprising placing the substrate into a sealable processing chamber, evacuating the interior of the chamber, immersing the substrate in a liquid and pressurizing the liquid (col. 3, lines 59-68). Col. 4, lines 35-37 teaches a pressure varying device to produce pressure changes in the chamber. Col. 7, lines 35-55 teaches reducing the pressure twice in the chamber. Re claim 3, see col. 7, lines 35-55, col. 2, lines 45-49. Re claim 4, col. 7, lines 44-47. Re claim 5, col. 3, lines 1-7, 20-23, 36-40, col. 4, lines 5-7, col. 5, lines 50-54. Re claims 6-7, col. 10, lines 45-47 teaches treating the substrate with water in the chamber 53 and further teaches that the substrate is wet prior to being removed from the chamber (col. 11, lines 3-5).

Response to Arguments

7. Applicant's election with traverse of Group I in the reply filed on 5/15/2006 is acknowledged. The traversal is on the ground(s) that the claims of Group II do not impose serious burden. This is not found persuasive because the inventions are independent or distinct for the reasons given in the previous office action and have acquired a separate status in the art in view of their different classification, restriction for examination purposes as indicated is proper. Additionally, the apparatus can be used for different purposes such as etching and coating, therefore requiring a different

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classification and field of search separate from that of class 134. The restriction requirement is maintained.

The requirement is still deemed proper and is therefore made FINAL.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Allen, Sr. teach the preservation of wood. Burke teaches cleaning porous parts. Muraki teaches impregnating wood. Grantham et al. teach pressure treating boards. Gray teaches a decompression processing system. Suh teaches using gas pressure to reduce porosity.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sharidan Carrillo whose telephone number is 571-272-1297. The examiner can normally be reached on M-W 6:30-4:00pm, alternating Thursday.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on 571-272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Sharidan Carrillo
Primary Examiner
Art Unit 1746

bsc



SHARIDAN CARRILLO
PRIMARY EXAMINER